

**REMARKS**

Applicants respectfully request further examination and reconsideration in view of the above amendments and the comments set forth fully below. Claims 31-43 and 45-49 were pending. Within the Office Action, Claims 31-43 and 45-49 have been rejected. By the above amendments, Claims 31-35, 37-39 and 45-49 have been amended. Accordingly, Claims 31-35, 37-43 and 45-49 are now pending.

As suggested by the Examiner, Applicants have amended the Claims 31, 34, 39 and 46-49 to replace the term "associated" with the more specific term "corresponding" when defining the relationship between the vials and the first and second drains. As such, the claims are sufficiently clear in defining the structural meaning in relationship to the configuration that the device is intended to be used to perform the claimed method.

**Rejections Under 35 U.S.C. § 102**

Within the Office Action, Claims 31-33, 42, 43, 45, 47 and 48 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,133,045 to Johnson et al. (hereinafter "Johnson"). The applicants respectfully disagree.

Johnson teaches an automated sample treatment system. Johnson teaches a waste plate 230 thereby allowing fluid to flow from the columns 41 of the filter plate 40 and pass through the bores 232 and into the waste tray 200. [Johnson, col. 7, lines 55-59, Figure 6] Johnson teaches that a shuttle means 90 is actuated to move the waste plate 230 in liquid communication with the sample plate 40. [Johnson, col. 10, lines 7-9] Johnson also teaches that the vacuum control apparatus 320 may be operatively coupled to two separate vacuum manifolds and provide vacuum thereto under the control of a vacuum switch or three way valve. [Johnson, col. 11, lines 15-20, Figures 14-16] Johnson does not teach coupling a waste tube to a selective one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Johnson does not teach moving the same waste tube to a selective one of the first drain and the second drain.

In contrast to the teachings of Johnson, the multi-well rotary synthesizer of the present invention includes a controller, a plurality of precision fit vials circularly arranged in multiple banks on a cartridge, a drain corresponding to each bank of vials, a chamber bowl, a plurality of

valves for delivering reagents to selective vials and a waste tube system for purging material from the vials. [Specification, p. 3, lines 8-11] The banks of vials can also be selectively purged, allowing the banks of vials to be used to synthesize different polymer chains. [Specification, p. 3, lines 8-11] The plurality of vials are held within the cartridge and divided among individual banks. [Specification, page 3, lines 15-16] Each individual bank of vials has a corresponding drain. [Specification, page 3, line 16] The reagent solution is purged from a bank of vials by rotating the cartridge until the corresponding drain is positioned above the waste tube system and coupling the waste tube system to the corresponding drain. As discussed above, Johnson does not teach coupling a waste tube to a *selective* one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Further, Johnson does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.

Applicants respectfully disagree with the contention within the Remarks to Arguments section that the prior art is not even required to have a second drain in order to meet the limitations of the claims, for example Claim 31. The claims do not provide coupling a waste tube to one of a first drain and a second drain, where only one drain is present. Rather the claims provide, "coupling a waste tube to a selective one of the first drain and the second drain..." Thus, for the waste tube to be coupled to a selective one of a first drain and a second drain, it must be possible to select one of the two drains. Therefore, two drains must be present. Hence, prior art with only one drain inherently cannot select two drains. This is different from language stating "one or more" where the broadest reasonable interpretation is one. Here, two drains are present, otherwise there would be no selection. Further, at the Examiner's suggestion, the claims have been amended to add "providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube."

Johnson does not teach coupling a waste tube to a selective one of a first drain and a second drain. Furthermore, coupling comprises moving the waste tube to the selective one of the first drain and the second drain. Again, it is inherently different when there is only one drain

versus two drains as in the presently claimed invention. The movement of a waste tube to a selected drain where the waste tube chooses from two different drains to couple to is not equivalent to one waste tube going to one drain. Although claims are to be given their broadest reasonable interpretation, leaving out specific limitations in the claims is not reasonable.

The independent Claim 31 is directed to a method of selectively and sequentially dispensing a plurality of reagent solutions to a plurality of vials divided into a first bank of vials and a second bank of vials and selectively purging material from the first bank of vials and the second bank of vials. The method of Claim 31 comprises providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube, dispensing one or more of the plurality of reagent solutions through a selection one of the plurality of valves to a selective one or more of the plurality of vials, to perform synthesis within the selective one or more of the plurality of vials, coupling a waste tube to a selective one of the first drain and the second drain within a purging system and purging material from the selected one of the first bank of vials and the second bank of vials through the purging system. It is further specified in Claim 31 that coupling the waste tube to a *selective* one of the first drain and the second drain comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. As discussed above, Johnson does not teach coupling a waste tube to a *selective* one of a first drain and a second drain within a purging system, wherein coupling comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Further, Johnson does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube. For at least these reasons, the independent Claim 31 is allowable over the teachings of Johnson.

Claims 32, 33 and 45 are all dependent on the independent Claim 31. As described above, the independent Claim 31 is allowable over the teachings of Johnson. Accordingly, the Claims 32, 33 and 45 are all also allowable as being dependent on an allowable base claim.

The independent Claim 42 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 42 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube to a selective one of the first drain and the second drain and forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 42 that coupling the waste tube to a *selective* one of the first drain and the second drain comprises *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. As discussed above, Johnson does not teach coupling a waste tube to a *selective* one of a first drain and a second drain, wherein coupling comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 42 is allowable over the teachings of Johnson.

Claim 43 is dependent on the independent Claim 42. As described above, the independent Claim 42 is allowable over the teachings of Johnson. Accordingly, the Claim 43 is also allowable as being dependent on an allowable base claim.

The independent Claim 47 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 47 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube with a selective one of the first drain and the second drain, forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective one of the first vial and the second vial through the waste tube and uncoupling the waste tube

from the selective one of the first drain and the second drain after the material has been purged. It is further specified in Claim 47 that coupling the waste tube with a *selective* one of the first drain and the second drain comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. As discussed above, Johnson does not teach coupling a waste tube with a *selective* one of the first drain and the second drain, wherein coupling comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 47 is allowable over the teachings of Johnson.

The independent Claim 48 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 48 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube with a selective one of the first drain and the second drain and purging material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 48 that coupling the waste tube with a selective one of the first drain and the second drain comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. As discussed above, Johnson does not teach coupling a waste tube with a *selective* one of the first drain and the second drain, wherein coupling comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 48 is allowable over the teachings of Johnson.

Within the Office Action, Claims 31, 42, 47 and 48 have been rejected under 35 U.S.C. § 102(a) as being anticipated by PCT Publication No. WO 98/00520 by Hashimoto et al. (hereinafter "Hashimoto"). The applicants respectfully disagree.

Hashimoto teaches an automatic testing apparatus. Hashimoto teaches that first and second drainage tubes C11-8 and C11-9 come below a discharge port of the first culture tube F14-2 and a discharge port of the second culture tube F14-3 to catch the drainage when the first and second bottom caps F14-10 and F14-11 are detached and stored. Hashimoto does not teach coupling the same waste tube to a selective one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Hashimoto does not teach moving the same waste tube to a selective one of the first drain and the second drain.

In contrast to the teachings of Hashimoto, the multi-well rotary synthesizer of the present invention includes a controller, a plurality of precision fit vials circularly arranged in multiple banks on a cartridge, a drain corresponding to each bank of vials, a chamber bowl, a plurality of valves for delivering reagents to selective vials and a waste tube system for purging material from the vials. [Specification, p. 3, lines 8-11] The banks of vials can also be selectively purged, allowing the banks of vials to be used to synthesize different polymer chains. [Specification, p. 3, lines 8-11] The plurality of vials are held within the cartridge and divided among individual banks. [Specification, page 3, lines 15-16] Each individual bank of vials has a corresponding drain. [Specification, page 3, line 16] The reagent solution is purged from a bank of vials by rotating the cartridge until the corresponding drain is positioned above the waste tube system and coupling the waste tube system to the corresponding drain. As discussed above, Hashimoto does not teach coupling a waste tube to a selective one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Further, Hashimoto does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.

As discussed above, Applicants respectfully disagree with the contention within the Remarks to Arguments section that the prior art is not even required to have a second drain in

order to meet the limitations of the claims, for example Claim 31. The claims do not provide coupling a waste tube to one of a first drain and a second drain where only one drain is present. Rather the claims provide, “coupling a waste tube to a selective one of the first drain and the second drain...” Thus, for the waste tube to be coupled to a selective one of a first drain and a second drain, it must be possible to select one of the two drains. This is different from language stating “one or more” where the broadest reasonable interpretation is one. Here, two drains are present, otherwise there would be no selection. Further, at the Examiner’s suggestion the claims have been amended to add “providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.”

Hashimoto does not teach coupling a waste tube to a selective one of a first drain and a second drain. Furthermore, coupling comprises moving the waste tube to the selective one of the first drain and the second drain. The movement of a waste tube to a selected drain where the waste tube chooses from two different drains to couple to is not equivalent to one waste tube going to one drain. Although claims are to be given their broadest reasonable interpretation, leaving out specific limitations in the claims is not reasonable.

The independent Claim 31 is directed to a method of selectively and sequentially dispensing a plurality of reagent solutions to a plurality of vials divided into a first bank of vials and a second bank of vials and selectively purging material from the first bank of vials and the second bank of vials. The method of Claim 31 comprises providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube, dispensing one or more of the plurality of reagent solutions through a selective one of the plurality of valves to a selective one or more of the plurality of vials, to perform synthesis within the selective one or more of the plurality of vials, coupling a waste tube to a selective one of the first drain and the second drain within a purging system and purging material from the selected one of the first bank of vials and the second bank of vials through the purging system. It is further specified in Claim 31 that coupling the waste tube to a *selective* one of the first drain and the second drain comprises *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. As discussed above, Hashimoto does not teach coupling a waste tube to a

selective one of a first drain and a second drain by *moving* the waste tube to the *selective* one of the first drain and the second drain until the waste tube is coupled with the *selective* one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Further, Hashimoto does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube. For at least these reasons, the independent Claim 31 is allowable over the teachings of Hashimoto.

The independent Claim 42 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 42 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube to a selective one of the first drain and the second drain and forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 42 that coupling the waste tube to a selective one of the first drain and the second drain comprises *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. As discussed above, Hashimoto does not teach coupling a waste tube to a *selective* one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Further, Hashimoto does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 42 is allowable over the teachings of Hashimoto.

The independent Claim 47 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 47 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a



second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube with a selective one of the first drain and the second drain, forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective one of the first vial and the second vial through the waste tube and uncoupling the waste tube from the selective one of the first drain and the second drain after the material has been purged. It is further specified in Claim 47 that coupling the waste tube with a *selective* one of the first drain and the second drain comprises *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. As discussed above, Hashimoto does not teach coupling a waste tube with a *selective* one of the first drain and the second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Further, Hashimoto does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 47 is allowable over the teachings of Hashimoto.

The independent Claim 48 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 48 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling the waste tube with a selective one of the first drain and the second drain and purging material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 48 that coupling the waste tube with a selective one of the first drain and the second drain comprises *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. As discussed above, Hashimoto does not teach coupling a waste tube with a *selective* one of the first drain and the second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is

coupled with the selective one of the first drain and the second drain. Hashimoto teaches a drainage tube associated with each culture tube. Further, Hashimoto does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 48 is allowable over the teachings of Hashimoto.

### **Rejections Under 35 U.S.C. § 103**

Within the Office Action, Claims 34-41, 46 and 49 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson. The applicants respectfully disagree. It is recognized within the Office Action that Johnson does not teach moving the drain tube to be coupled to the waste tube. It is then concluded within the Office Action that it would have been obvious to one of ordinary skill in the art at the time of the invention that once the waste has been collected from one sample plate, the processed sample plate may be removed and replaced within another sample plate of the same format without moving the waste collection plate down from its position thereby allowing the sample plate to be moved towards and coupled to the waste tube. The applicants respectfully disagree. As discussed above, Johnson does not teach coupling a waste tube to a *selective* one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Johnson does not teach moving the same waste tube to a selective one of the first drain and the second drain. Accordingly, it would not be obvious from the teachings of Johnson to move a *selective* one of a first drain and a second drain to the same waste tube. Further, Johnson does not teach or make obvious providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.

Johnson teaches that precise positioning of the waste plate underneath the sample plate will be provided by the carriage 112 coacting with the micro-switch 142 to provide positive feedback to the vacuum controller 364 in order to verify that the waste plate 230 is properly indexed below the sample plate 40. At this time the vacuum controller 364 will communicate with the motor controller to drive the cam motor 270 in order to elevate the waste plate 230 in

liquid communication with the sample plate 40. Positive vertical position feedback will be provided by micro-switch 160 sending a signal to the vacuum controller 364 to assure that correct lift has been obtained. After the vacuuming is performed, the vacuum controller 364 then disassociates the waste plate 230 from the sample plate 40 and places the collection plate 240 underneath the sample plate 40. [Johnson, column 10, lines 13-42] Hence, Johnson utilizes very exacting techniques to ensure that there is a secure fit when moving the waste plate underneath the sample plate. A micro-switch is used to provide feedback to a vacuum controller so that the vacuum controller is able to determine the correct alignment and the correct lift. To then assume once the waste plate is positioned, it would be possible to simply remove the sample plate and replace it is improper. Nothing in Johnson teaches, hints or suggests that such actions are possible. Furthermore, Johnson specifically states that after the vacuuming process is completed, the waste plate is removed and replaced with a collection plate. There is nothing in Johnson to indicate that moving the sample plate to the waste plate would be obvious. If anything, Johnson specifically teaches away from such a suggestion, since immediately after the vacuuming process is completed, the waste plate is disassociated and the collection plate is positioned underneath the sample plate.

In contrast to the teachings of Johnson, the multi-well rotary synthesizer of the present invention includes a controller, a plurality of precision fit vials circularly arranged in multiple banks on a cartridge, a drain corresponding to each bank of vials, a chamber bowl, a plurality of valves for delivering reagents to selective vials and a waste tube system for purging material from the vials. [Specification, p. 3, lines 8-11] The banks of vials can also be selectively purged, allowing the banks of vials to be used to synthesize different polymer chains. [Specification, p. 3, lines 8-11] The plurality of vials are held within the cartridge and divided among individual banks. [Specification, page 3, lines 15-16] Each individual bank of vials has a corresponding drain. [Specification, page 3, line 16] The reagent solution is purged from a bank of vials by rotating the cartridge until the corresponding drain is positioned above the waste tube system and coupling the waste tube system to the corresponding drain. As discussed above, Johnson does not teach coupling a waste tube to a *selective* one of a first drain and a second drain by *moving* the waste tube to the selective one of the first drain and the second drain until the waste tube is coupled with the selective one of the first drain and the second drain. Johnson teaches a vacuum switch or three way valve. Johnson does not teach moving the same waste tube to a *selective* one of the first drain and the second drain. Accordingly, it would not be obvious from the teachings of Johnson to move a selective one of a first drain and a second drain to the same waste tube. As

also discussed above, Johnson does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.

Applicants respectfully disagree with the contention within the Remarks to Arguments section that the prior art is not even required to have a second drain in order to meet the limitations of the claims, for example Claim 31. The claims do not provide coupling a waste tube to one of a first drain and a second drain, where only one drain is present. Rather the claims provide, "coupling a waste tube to a selective one of the first drain and the second drain..." Thus, for the waste tube to be coupled to a selective one of a first drain and a second drain, it must be possible to select one of the two drains. Therefore, two drains must be present. Hence, prior art with only one drain inherently cannot select two drains. This is different from language stating "one or more" where the broadest reasonable interpretation is one. Here, two drains are present, otherwise there would be no selection. Further, at the Examiner's suggestion, the claims have been amended to add providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube.

Johnson does not teach coupling a waste tube to a selective one of a first drain and a second drain. Furthermore, coupling comprises moving the waste tube to the selective one of the first drain and the second drain. Again, it is inherently different when there is only one drain versus two drains as in the presently claimed invention. The movement of a waste tube to a selected drain where the waste tube chooses from two different drains to couple to is not equivalent to one waste tube going to one drain. Although claims are to be given their broadest reasonable interpretation, leaving out specific limitations in the claims is not reasonable.

The independent Claim 34 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 34 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling a selective one of the first drain and the second drain with the waste tube, forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective

one of the first vial and the second vial through the waste tube and uncoupling the selective one of the first drain and the second drain from the waste tube after the material has been purged. It is further specified within Claim 34 that coupling a selective one of the first drain and the second drain with the waste tube comprises moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. As discussed above, Johnson does not teach or make obvious coupling a *selective* one of a first drain and a second drain with a waste tube by moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 34 is allowable over the teachings of Johnson.

Claim 36 has previously been canceled. Claims 35, 37 and 38 are all dependent on the independent Claim 31. As described above, the independent Claim 31 is allowable over the teachings of Johnson. Accordingly, the Claims 35, 37 and 38 are all also allowable as being dependent on an allowable base claim.

The independent Claim 39 is directed to a method of selectively and sequentially dispensing a plurality of reagent solutions to a plurality of vials divided into a first bank of vials and a second bank of vials and selectively purging material from the first bank of vials and the second bank of vials. The method of Claim 39 comprises providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube, dispensing one or more of the plurality of reagent solutions to a selective one or more of the plurality of vials, to perform synthesis within the selective one or more of the plurality of vials, coupling a selective one of the first drain and the second drain with the waste tube and purging material from the selected one of the first bank of vials and the second bank of vials. It is further specified within Claim 39 that coupling a selective one of the first drain and the second drain with the waste tube comprises moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. As discussed above, Johnson does not teach or make obvious

coupling a *selective* one of a first drain and a second drain with a waste tube by moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. Further, Johnson does not teach providing a multi-well synthesizer including a controller, a plurality of vials divided into a first bank of vials and a second bank of vials, a plurality of valves for delivering reagent solutions to selective vials, a first drain corresponding to the first bank of vials, a second drain corresponding to the second bank of vials and a waste tube. For at least these reasons, the independent Claim 39 is allowable over the teachings of Johnson.

Claims 40 and 41 are both dependent on the independent Claim 39. As described above, the independent Claim 39 is allowable over the teachings of Johnson. Accordingly, the Claims 40 and 41 are both also allowable as being dependent on an allowable base claim.

The independent Claim 46 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of Claim 46 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling a selective one of the first drain and the second drain with the waste tube and forming a pressure differential between an interior and an exterior of the selective one of the first vial and the second vial, thereby expelling material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 46 that coupling a selective one of the first drain and the second drain with the waste tube comprises moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. As discussed above, Johnson does not teach or make obvious coupling a *selective* one of a first drain and a second drain with a waste tube by moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 46 is allowable over the teachings of Johnson.

The independent Claim 49 is directed to a method of selectively purging material from a selective one of a first vial and a second vial in which synthesis is taking place. The method of

Claim 49 comprises providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube, coupling a selective one of the first drain and the second drain with the waste tube and purging material from the selective one of the first vial and the second vial through the waste tube. It is further specified in Claim 49 that coupling a selective one of the first drain and the second drain with the waste tube comprises moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. As discussed above, Johnson does not teach or make obvious coupling a *selective* one of a first drain and a second drain with a waste tube by moving the selective one of the first drain and the second drain to the waste tube until the selective one of the first drain and the second drain is coupled with the waste tube. Further, Johnson does not teach providing a multi-well rotary synthesizer including a controller, a first vial, a second vial, a plurality of valves for delivering reagent solutions to a selective one of the first vial and the second vial, a first drain corresponding to the first vial, a second drain corresponding to the second vial and a waste tube. For at least these reasons, the independent Claim 49 is allowable over the teachings of Johnson.

Applicants respectfully submit that the claims, as amended, are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,  
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Dated: January 3, 2006

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**CERTIFICATE OF MAILING (37 CFR § 1.8(a))**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

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Date: 1-3-06 By: [Signature]